MS115203.1





CLEAN VERSION OF ALL PENDING CLAIMS

In the Claims:

All pending claims are listed in this section for purposes of clarity

- 1. A man-machine interface method for assisting a user in a decision making process, for use with a machine having a video monitor device and a user input device, the man-machine interface method comprising steps of:
 - a) accepting an event from the user input device; and
 - b) generating a display for output on the video monitor device, the display including
 - i) a first window displaying first information of a first type, the first information being related to the event, and
 - ii) a second window displaying second information of a second type, the second information being related to the event.
- 2. The man-machine interface method of claim 1 wherein the display generated simulates a three-dimensional environment in which the first and second windows reside.
- 3. The man-machine interface method of claim 2 wherein the first and second windows are represented as sides of an unfolded geometric object.
- 4. The man-machine interface method of claim 2 wherein the first and second windows are represented as sides of an unfolded cube.
- 5. The man-machine interface method of claim 2 wherein each of the first and second windows include a maximize button,

wherein when the maximize button of the first window is selected, a display having the first window, arranged in normal, head-on, view, is generated, and

wherein when the maximize button of the second window is selected, a display having the second window, arranged in normal, head-on, view, is generated.





- 6. The man-machine interface method of claim 1 further comprising a step of:
- c) generating a visual indicator for associating the first information of the first window and the second information of the second window.
- 7. The man-machine interface method of claim 6 wherein the visual indicator is selected from a group of visual indicators consisting of (a) a colored line, (b) a colored ray, and (c) a colored arc.
- 8. The man-machine interface method of claim 7 wherein the visual indicator is translucent.
- 9. The man-machine interface method of claim 1 wherein the first window includes alternative representations of the first information, each of which is related to the event.
- 10. The man-machine interface method of claim 9 wherein the first window depicts a calendar having a number of alternative time sequences, wherein the alternative representations of the first information may be an alternative time duration on each of the alternative time sequences.
- 11. The man-machine interface method of claim 1 further comprising a step of:
 - c) forming a search query based, at least in part, on contents of the event.
- 12. The man-machine interface method of claim 11 wherein the search query is further based, at least in part, on a user profile.
- 13. The man-machine interface method of claim 11 further comprising steps of:
 - d) returning a result of the search query;
 - e) determining whether the result includes any information of the first type or of the second type; and
 - f) if the result includes any information of the first type, generating a visual representation of such information on the first window, and if the result includes any information of the second type, generating a visual representation of such information on the second window.

09/329,140 MS115203.1

14. The man-machine interface method of claim 1 wherein the first window is a bulletin board, and

wherein a note, having contents entered by a user, is arranged on the bulletin board and defines the event.

- 15. The man-machine interface method of claim 1 wherein the first window is a map, and wherein a place of the map related to the event includes a marker.
- 16. The man-machine interface method of claim 15 wherein the marker is a colored circle.
- 17. The man-machine interface method of claim 16 wherein the marker is translucent.
- 18. The man-machine interface method of claim 16 wherein the second window is a bulletin board.

wherein a note, having contents entered by a user, is arranged on the bulletin board, defines the event, and has a color which matches the color of the marker.

- 19. The man-machine interface method of claim 1 wherein the first window is an information browser.
- 20. The man-machine interface method of claim 19 further comprising a step of:
 - c) forming a search query based, at least in part, on contents of the event.
- 21. The man-machine interface method of claim 20 wherein the search query is further based, at least in part, on a user profile.
- 22. The man-machine interface method of claim 20 further comprising steps of:
 - d) submitting the search query to the information browser:
 - e) returning a result of the search query;
 - f) determining whether the result includes any information of the second type; and

09/329,140 M\$115203.1

- g) if the result includes any information of the second type, generating a visual representation of such information on the second window.
- 23. The man-machine interface method of claim 22 wherein the information browser is selected from a group consisting of (a) a browser for browsing HTML pages, (b) a browser for browsing documents, (c) a browser for browsing databased files, (d) a browser for browsing a schedule, (e) a browser for browsing a to do list, and (f) a browser for browsing contacts.
- 24. The man-machine interface method of claim 22 wherein the second window is a map, and wherein information of the second type includes places and addresses.
- 25. A man-machine interface for assisting a user in a decision making process, for use with a machine having a video monitor device and a user input device, the man-machine interface comprising:
 - a) a standby state in which a display including a simulated three dimensional environment having
 - i) a first window displaying first information of a first type, the first information defining an event, and
 - a second window displaying second information of a second type, the second information being related to the event,
 - is generated for rendering on the video monitor device;
 - a first window update state during which the user can update the first window by entering commands via the user input device;
 - c) a second window update state during which the user can update the second window by entering commands via the user input device;
 - a first window focus view state in which a display including the first window, arranged in a normal head-on view, is generated for rendering on the video monitor device; and
 - a second window focus view state in which a display including the second window, arranged in a normal head-on view, is generated for rendering on the video monitor device.

MS115203.1

- 26. The man-machine interface of claim 25 wherein, when in the standby state,
 - i) if a first user command is received from user input device, the first window update state is entered.
 - ii) if a second user command is received from user input device, the second window update state is entered,
 - iii) if a third user command is received from user input device, the first window focus view state is entered, and
 - iv) if a fourth user command is received from the user input device, the second window focus view state is entered.
- 27. The man-machine interface of claim 26 wherein the first user command is locating a cursor over the first window, the second user command is locating a cursor over the second window, the third user command is clicking a maximize button of the first window, and the fourth user command is clicking a maximize button of the second window.
- 28. The man-machine interface of claim 26 wherein each of the first window focus view state and the second window focus view state include a world-in-miniature tool which includes a representation of the standby state.
- 29. The man-machine interface of claim 26 wherein, when in the first window focus view state,
 - i) if a first user command is received from the input device, the standby state is entered, and
 - ii) if a second user command is received from the input device, the second windows focus view state is entered.
- 30. The man-machine interface of claim 29 wherein the first user command is a click on a minimize button on the first window and the second user command is a flicking gesture.
- 31. A method for managing a man-machine interface, including
 - a first window for displaying first information of a first type, the first information being

MS115203.1

related to an event, and

a second window for displaying second information of a second type, the second information being related to the event,

for assisting a user in a decision making process, for use with a machine having a video monitor device and a user input device, the method comprising steps of:

- a) accepting user commands from the user input device;
- b) updating states of the first and second windows based on the user commands accepted;
- c) determining a state of the man-machine interface based on the user commands accepted; and

d)

- i) if the state of the man-machine interface is a standby state,
 - A) generating a display of a three dimensional environment including the first and second windows for rendering on the video monitor device, and
 - B) generating a visual link from the first information in the first window to the second information in the second window
- ii) if the state of the man-machine interface is a first window focus view state, generating a display of the first window in a normal, head on, view, and
- iii) if the state of the man-machine interface is a second window focus view state, generating a display of the second window in a normal, head on, view.
- 32. The method of claim 31 wherein the step of updating states of the first and second windows based on the user commands accepted includes steps of:
 - i) generating an query based on at least one of the (a) the user inputs and (b) a user profile;
 - ii) processing the query to generate a return; and
 - determining whether the return includes information of the first type or information of the second type, wherein if the return includes information of the first type, the first window is updated, and wherein if the return includes

CY LLP.

09/329,140

MS115203.1

information of the second type, the second window is updated.

- 33. The method of claim 31 wherein the first window is a bulletin board, and wherein the step of updating states of the first and second windows based on the user commands accepted includes steps of:
 - i) determining whether a cursor is on the first window and if so,
 - A) determining whether a note creation command was entered and if so, accepting text via the user input device;
 - B) determining whether a note edit command was entered and if so, editing a note based on entries from the user input device;
 - C) determining whether a note posting command was entered and if so,
 - generating a query based on the contents of the note,
 - processing the query to generate a return, and
 - determining whether the return includes an information of the second type and if so, updating the second window; and
 - D) determining whether a note move command was entered and if so, updating a location of the note on the bulletin board.
- 34. (Amended) The method of claim 33 wherein the note creation command is a mouse click when a cursor is located over an empty part of the bulletin board.

wherein the note edit command is a mouse click when a cursor is located over an existing note on the bulletin board,

wherein a note posting command is a flicking gesture, and wherein a note move command is a mouse drag.

- 35. The method of claim 33 wherein, if one of a note creation command and a note edit command is entered, further performing a step of displaying the note in a normal, head on, view in a foreground of the three dimensional environment.
- 36. The method of claim 31 wherein the first window is a map, wherein the map includes a marker at a location associated with the event, and

09/329,140

M\$115203.1

wherein the step of updating states of the first and second windows based on the user commands accepted includes steps of:

- i) determining whether a cursor is on the first window and if so,
 - A) determining whether a marker delete command is entered and if so, deleting the marker from the map, and
 - B) determining whether a marker move command is entered and if so, moving the marker on the map.
- 37. The method of claim 36 wherein if a marker move command is entered, the event is updated to reflect its new location.
- 38. The method of claim 31 wherein the first window is a calendar, wherein the calendar includes a number of alternative time lines, wherein the calendar includes an interval at a data associated with the event, in each of the alternative time lines, and

wherein the step of updating states of the first and second windows based on the user commands accepted includes steps of:

- i) determining whether a cursor is on the first window and if so,
 - A) determining a selected one of the alternative time lines,
 - B) determining whether an interval in the selected one of the alternative time lines is subject to a move command and if so, moving the interval,
 - C) determining whether an interval in the selected one of the alternative time lines is subject to a lengthen command and if so, lengthening the duration of the interval.
 - D) determining whether an interval in the selected one of the alternative time lines is subject to a shorten command and if so, shortening the duration of the interval,
 - E) determining whether an interval in the selected one of the alternative time lines is subject to a deletion command and if so, deleting the interval, and
 - F) determining whether an interval creation command is entered and if so,

09/329,140

M\$115203.1

generating an interval in at least the selected one of the alternative time lines.

39. The method of claim 31 wherein if the state of the man-machine interface is the standby state, and if the first window is maximized, the first window focus view state is entered, and

wherein if the state of the man-machine interface is the standby state, and if the second window is maximized, the second window focus view state is entered.

40. The method of claim 31 wherein if the state of the man-machine interface is the first window focus view state, and if the first window is minimized, the standby state is entered, and

wherein if the state of the man-machine interface is the first window focus view state, and if a flicking gesture is entered, the second window focus view state is entered.

- 41. A system for assisting a user in a decision making process, the system comprising:
 - a) an input facility for accepting user inputs;
 - b) a processing facility for
 - i) accepting user inputs from the input facility,
 - determining an event based on user inputs from the input facility,
 - iii) determining first information of a first type, the first information being related to the event,
 - iv) determining second information of a second type, the second information being related to the event,
 - v) determining a first window including a visual representation of the first information,
 - vi) determining a second window including a visual representation of the second information,
 - vii) generating a simulated three dimensional environment,
 - viii) determining a display state based on user inputs from the input facility, and
 - ix) generating video outputs including

- A) the first and second windows arranged in the simulated three dimensional environment when a first display state is determined.
- B) the first window, in a normal, head on, view when a second display state is determined, and
- c) the second window, in a normal, head on, view when a third display state is determined; and
- c) a video monitor unit for rendering the video outputs generated by the processing facility.
- 42. The system of claim 41 wherein the processing facility further updates states of the first and second windows based on the user commands accepted by the input facility.
- 43. The system of claim 42 wherein the processing facility updates states of the first and second windows by:
- i) generating an query based on at least one of the (a) the user inputs and (b) a user profile;
 - ii) processing the query to generate a return; and
 - determining whether the return includes information of the first type or information of the second type, wherein if the return includes information of the first type, the first window is updated, and wherein if the return includes information of the second type, the second window is updated.
- 44. The system of claim 42 wherein the first window is a bulletin board, and wherein the processing facility updates states of the first and second windows by:
 - i) determining whether a cursor is on the first window and if so,
 - A) determining whether a note creation command was entered and if so, accepting text via the user input device,
 - B) determining whether a note edit command was entered and if so, editing a note based on entries from the user input device;
 - C) determining whether a note posting command was entered and if so,
 - generating a query based on the contents of the note,

- processing the query to generate a return, and
- determining whether the return includes any information of the second type and if so, updating the second window; and
- D) determining whether a note move command was entered and if so, updating a location of the note on the bulletin board.
- 45. The system of claim 44 wherein the note creation command is a mouse click when a cursor is located over an empty part of the bulletin board,

wherein the note edit command is a mouse click when a cursor is located over an existing note on the bulletin board,

wherein a note posting command is a flicking gesture, and wherein a note move command is a mouse drag.

- 46. The system of claim 44 wherein, if one of a note creation command and a note edit command is entered, the note is displayed, on the video monitor, in a normal, head on, view in a foreground of the three dimensional environment.
- 47. The system of claim 42 wherein the first window is a map, wherein the map includes a marker at a location associated with the event, and wherein the processing facility updates states of the first and second windows by:
 - i) determining whether a cursor is on the first window and if so,
 - A) determining whether a marker delete command is entered and if so, deleting the marker from the map, and
 - B) determining whether a marker move command is entered and if so, moving the marker on the map.
- 48. The system of claim 47 wherein if a marker move command is entered, the processing facility updates the event to reflect its new location.
- 49. The system of claim 42 wherein the first window is a calendar, wherein the calendar includes a number of alternative time lines,

09/329.140

MS115203.1

wherein the calendar includes an interval at a date associated with the event, in each of the alternative time lines, and

wherein the processing facility updates states of the first and second windows by:

- i) determining whether a cursor is on the first window and if so,
 - A) determining a selected one of the alternative time lines.
 - B) determining whether an interval in the selected one of the alternative time lines is subject to a move command and if so, moving the interval,
 - C) determining whether an interval in the selected one of the alternative time lines is subject to a lengthen command and if so, lengthening the duration of the interval,
 - D) determining whether an interval in the selected one of the alternative time lines is subject to a shorten command and if so, shortening the duration of the interval,
 - E) determining whether an interval in the selected one of the alternative time lines is subject to a deletion command and if so, deleting the interval, and
 - F) determining whether an interval creation command is entered and if so, generating an interval in at least the selected one of the alternative time lines.
- 50. A tangible medium storing or communicating machine readable instructions which, when executed by a machine, performs steps of:
 - (a) accepting an event from the user input device; and
 - (b) generating a display for output on the video monitor device, the display including
 - a first window displaying first information of a first type, the first information being related to the event, and
 - (ii) a second window displaying second information of a second type, the second information being related to the event.